

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT Ronald A. Katz

SERIAL NO. 07/425,779

October 23, 1989 FILED

TELEPHONE INTERFACE FOR.

CALL PROCESSING SYSTEM

WITH CALL SELECTIVITY

DOCKET NO. : 4646-114C Examiner S. Woo

Art Unit 261

RECEIVED

JUN 27 1991

AMENDMENT

GROUP 260

June 20, 1991 201 North Figueroa Street Los Angeles, California 90012

Commissioner of Patents and Trademarks Washington, D. C. 20231

Sir:

In response to the Office Action mailed March 21, 1991, please amend the above-identified patent application as follows:

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner of Patents and Trademarks, Washington, D. C. 20231.

Date: June 20, 1991

Sandra Reisman

14-1100 010 102

120.00CH

LA10186 0#/25/91 07425779

120.00CH

LA10187 (6/25/91 07425779

14-1100 010 103

IN THE SPECIFICATION:

Page 1, line 7, after "System" and before the period, insert.—which was a continuation-in-part of Application Serial No. 194,258 filed May 16, 1988, and entitled "Telephonic-Interface Statistical Analysis System", now U.S. Patent No. 4,845,739, which was a continuation-in-part of Application Serial No. 018,244 filed February 24, 1987, and entitled "Statistical Analysis System For Use With Public Communication Facility", now U.S. Patent No. 4,792,968, which was a continuation-in-part of Application Serial No. 753,299 filed July 10, 1985, and entitled "Statistical Analysis System For Use With Public Communication Facility", now abandoned.

IN THE CLAIMS:

Cancel claims 6 and 12.

Amend claims 1-5, 7-9, 11 and 13-16 as follows.

Add new claims 17-28 as follows.

(Amended) A telephone call processing system for receiving calls from a multitude of terminals in different call modes including an "800" call mode and a "900" call mode for processing to an interface format and involving digital signals associated with said terminals as for identification or data, said system comprising:

. 5

W

1

5

7

8

9

first response unit means for receiving calls in said "800" [a first] call mode;

qualification means for qualifying said calls in said "800" [a first] call mode received by said first response
unit to provide qualified calls;

second response unit means for receiving calls in a second call mode;

means for processing calls in an interface format; and

means for coupling said qualified calls and said calls in a second mode to said means for processing.

2. (Amended) A system according to claim 1 wherein said second [first] response unit is coupled to receive [caller-free "800" type] calls in said "900" call mode.

wherein said qualification means comprises means for testing said digital signals associated with said terminals originating said calls in said "800" call [a first] mode.

(Amended) A system according to claim 3 further including a free-call memory structure tallying said digital signals associated with said [caller-free] "800" call mode [type calls] and wherein said means for testing tests the content of said memory structure.

H.

 $\bigcup_{0}^{2} U^{\frac{1}{2}}$

(Amended) A system according to claim 4 wherein said second response unit is coupled to receive calls in said [caller-paying] "900" call mode [type calls].

SUD 1 B. 22

1

7. (Amended) A system according to claim <u>5</u> [1] wherein said qualification means comprises means for testing select digits of said digital signals associated with said terminals originating said calls in a first mode.

(Amended) A system according to claim 2 [7] wherein said qualification means comprises a test structure for testing said digital signals associated with said terminals originating said calls in said "800" call [a first] mode.

(Amended) A system according to claim 1 [8] wherein said qualification means [test structure] includes means for testing select digits of said digital signals associated with a calling terminal for identification.

1

(Amended) A telephone call processing system for receiving calls from a multitude of terminals for processing to an interface format and involving digital signals associated with said terminals as for identification or data, said system comprising:

cue means for prompting question responses from said terminals in the form of digital signals as data;

question selection means for selecting individual questions from a plurality of questions for actuating said cue means:

call record memory means for storing identified questions cued to said terminals, addressable by said digital signals associated with said terminals for identification;

test means for testing individual questions selected by said question selection means against questions from said call record memory means to detect coincidence; and

control means coupled to said cue means, <u>said</u>
selection means, <u>said</u> memory means and <u>said</u> test means, <u>said</u>
control means for sequencing operations to select a question,
test the selected question and either actuate said cue means
or select another question under control of said test, <u>said</u>
control means also including a gate structure for inhibiting
the cue means in the event of selecting a question of record
in said call record memory means.

 $\begin{array}{c}
1 \\
1 \\
1 \\
1 \\
2 \\
3 \\
4 \\
1 \\
5
\end{array}$

A telephone call processing system according to claim 11 further including processing means [for receiving calls from a multitude of terminals for processing to an interface format and involving digital signals associated with said terminals as for identification or data, said system comprising:

receiving means for receiving digital signals representative of numbers associated with said terminals for identification;

memory means for storing a predetermined sequence of select digits representative of a component of numbers associated with terminals for identification;

means for testing a predetermined component of select digital signals representative of numbers associated with said terminals for identification from said receiving means against said predetermined sequence of select digits from said memory means to provide a control signal; and

means for accepting calls from said terminals in accordance with said control signal].

- 14. (Amended) A system according to claim 11 [13] wherein said memory means stores the last three digits of numbers associated with acceptable terminals for identification and thereby controls said processing means based on acceptance of said calls.
- 15. (Amended) A system according to claim $\underline{11}$ [13] wherein at least three digits are tested based on ANI.
- 16. (Amended) A system according to claim <u>11</u> [13] wherein the memory means holds complete phone numbers in memory to prevent duplicate use.

. 22

interfacing callers at a multitude of remote terminals for voice-digital communication through a telephone communication facility, said system comprising:

communication means for establishing telephone communication with currently active callers at certain of said terminals through said telephone communication facility;

means for providing identification signals to said communication means indicative of said currently active callers:

memory means for storing caller cues and use indications for said caller cues in relation to said callers as identified by said identification signals;

cue means for receiving said caller cues to provide voice signals through said communication means to prompt responses from said currently active of said callers in the form of digital data signals; and

means for selecting a current caller cue from said memory means for one of said currently active callers for application to said cue means under control of said identification signals for said one of said currently active callers and said use indications in said memory means for said one of said currently active callers.

5 4 b

1

3

Means for providing identification signals comprises means for providing at least a portion of the digits associated with a remote terminal for identification.

TAPS. A system according to claim 18 wherein said means for providing at least a portion of the digits includes means for receiving automatic number identification (ANI) signals.

↑ 20. A system according to claim 17 further including means to process said digital data signals. →

means for selecting includes means for addressing said memory means to provide a possible caller cue with use indications and coincidence means for testing said use indications for said possible caller cue against said identification signals for said one of said currently active callers.

means to provide a possible caller cue includes a random number generator for addressing said memory means.

1 2

means for selecting includes means to reject a caller cue indicated to have been used for a currently active caller.

interfacing callers at a multitude of remote terminals for voice-digital communication through a telephone communication facility, said communication facility providing number identification (ANI) signals indicative of the number for a calling remote terminal, said system comprising:

preliminary communication means for establishing preliminary telephone communication with callers at said terminals to receive said number identification (ANI) signals;

memory means for storing at least one predetermined sequence of select digits representative of only a portion of at least one of the numbers for identifying remote terminals;

means for testing said predetermined sequence of select digits against a select portion of a number for a calling terminal as represented by said number identification (ANI) signals for a current caller to provide a control signal; and

means for accepting calls for interface communication beyond said preliminary telephone communication from said terminals in accordance with said control signal.

-9-

Service Commence

3

claim 24 wherein said preliminary communication means comprises an audio response unit.

1

Claim 24 wherein said preliminary communication means comprises a response unit for receiving "800" mode calls.

2

W27. A telephone call processing system for receiving calls from a multitude of terminals for processing in a lottery interface format wherein callers are cued by synthesized voice signals supplied to said terminals and respond with digital signals, as by actuating push buttons at said terminals, said system comprising:

means for selectively receiving calls from said multitude of terminals to establish telephone communication with a select subset of callers;

means for providing identification signals for said callers of said select subset;

means for individually cuing said callers of said select subset to prompt digital signals for processing to isolate a sub-subset of said callers; and

means for storing identification signals for said gallers of said sub-subset. \mathcal{W}

15 16

12

13

14

-10-// /

means for selectively receiving calls comprises means for receiving calls in a plurality of call modes including an "800" calling mode.

REMARKS

Claims now in this case are 1-5, 7-11 and 13-28. An effort has been made to provide the claims in a form to clearly distinguish the references. Accordingly, reconsideration is respectfully requested with a view toward allowance.

The Katz reference (R), International Publication
No. WO 87/00375 coincides to the parent of U.S. Patent
4,792,968. In that regard, as now recited in the specification, the present application is a continuation-in-part of
Serial No. 312,792; which is a continuation-in-part of Serial
No. 194,258 (now patent 4,845,739); which is a continuationin-part of Serial No. 018,244 (now patent 4,792,968); which is
a continuation-in-part of Serial No. 753,299 which is the
equivalent of the reference. Accordingly, the international
application is not properly a reference against the present
case. In that regard, the claims herein are deemed to be
distinct from any claims appearing in prior cases; and
accordingly the doctrine of double patenting is not deemed to
be applicable.

With respect to the references Fodale (A) and Scanlon (B), as treated in detail below four major elements

distinguish the claim combinations. Each of the elements merit some detailed consideration.

The first distinguishing element has been recognized as patentable in view of the indication that claims 2-5 are directed to patentable subject matter (Paper No. 2, paragraph The distinguishing element might be characterized as "multiple mode" with "800 call qualification". That is, the combination system is capable of receiving calls in different modes, one of which is the "800" call mode for which calls are qualified. The system affords a distinct and improved capability, for example, affording callers entitlement to a limited number of "800" mode calls. Note that the Fodale reference (A) is directed to a system of testing and blocking calls originating from terminals where credit limits have been exceeded. However, the system is inapplicable to "800" call modes, because such modes are free (see Column 7, line 67).

With respect to the above distinction (qualify "800") applicable discussions in the specification appear at: page 5, line 19, and page 13, line 23. The following claims recite the distinction in one or another combination of elements: 1-5, 7-10 and 13-16.

The structure of a second distinguishing element might be called "cue selection". The structural element operates to selectively provide a cue, phrase or question that has not previously been provided to a caller. Of course, the

structure is incorporated in the interface system as specified by other elements in the combination claims.

The above distinction (cue selection) was recognized as patentable by the indicated allowability of claim 12 (Paper No. 2, paragraph 6). Details of the structure are provided in the specification at: page 5, line 28, and page 17, line 25. Current claims reciting the distinction are: 11, 13 and 17-23.

Incidentally, it is to be recognized that the Scanlon reference (B) involves a system for avoiding duplication of lottery entry numbers. The above distinguishing element is quite different in that the objective is to avoid duplicating cues to callers.

A third distinguishing structural element might be termed "selectivity based on partial ANI data". That is, in the combination of elements set forth in the claims, the distinguishing structure operates to reject calls based on a fragment or portion of a calling telephone number provided by ANI.

Note that Fodale also rejects calls; however, as indicated above, the operation is to block calls from terminals that are in payment default. Accordingly, a number is stored for each terminal-identifying number that is to be blocked. Applicant's operation involves a different objective and different structure. Specifically, the function of applicant's system is to selectively receive calls from a

number of terminals by registering a fragment or portion of an ANI calling number. The structure is described in greater detail in the specification at: page 5, line 25; page 10, line 17; page 11, line 5; and page 15, line 26. By using the structure, considerable flexibility is offered in selectively qualifying a percentage of telephone terminals to communicate with the system. Claims 24-26 are distinguished by the elemental recitation.

Finally, a fourth structural element might be called "sub sub lottery". Specifically, the system incorporates structure for limiting calls to a select set of terminals as variously described above. With the determination of an initial subset, the system proceeds to invoke a second processing operation to accomplish a sub sub set, as by interrogating a caller (Figure 2, block 68; page 18, line 9).

As a result of the second operation to generate a sub sub set, a select group of callers are stored (Figure 1, memory 36; page 19, line 6) as for final lottery processing.

The operation of sub sub set operation in a lottery format is deemed to be distinct from prior-art systems. The system is specified in claims 27 and 28.

In summary, claims herein are deemed to explicitly distinguish the references reciting explicit systems of

elements. Accordingly, reconsideration is respectfully requested with a view toward allowance.

Respectfully submitted

B. G. Nilsson Registration No. 17,350

Docket No. 4646-114C (213) 977-1001

JUN 27 1991

~4646-114C Case Docket No.

TE COMMISSIONER OF PATENTS AND BRADEMARKS Shington. DC 20231

In re application of Serial No.

Ronald A. Katz 07/425,779

Filed

October 23, 1989

TELEPHONE INTERFACE CALL PROCESSING SYSTEM WITH CALL For

sir:

Transmitted herewith is an amendment in the above-identified application.

Small entity status of this application under 37 C.F.R. 1.9 and 1.27 has been established by a verified statement previously submitted.

A verified statement to establish small entity status under 37 CFR 1.9 and 1.27 is enclosed.

No additional fee is required.

The fee has been calculated as shown below:

	Co	1. 1	Col. 2				
	REN AFT	AIMS MAINING TER ENDMENT	MINUS	HIGH PREV PAID	IOUSLY	PRESENT EXTRA	
TOTAL	*	26	-	**	20	6	
INDEP	*	5	_	***	3	2	
FI	RST	PRESEN'	r of M	ULT.	DEP. C	LAIM	

TOTAL ADDITIONAL FEE

		SMALL	ENTITY		SMALL	ENTIT
ENT A		RATE	ADD'L FEE	<u>OR</u>	RATE	ADD'
		× 10	\$	<u>or</u>	× 20	\$ 120
		x 30	\$	<u>OR</u>	x 60	\$ 120
		+100	\$	<u>OR</u>	+200	\$
			\$			\$ 240
TOTAL		\$	TOTAL		\$ 240	

OTHER THAN A

\$ 240

* If the entry in Col. 1 is less than the entry in Col. 2, write "0" in

Col. 3.
If the "Highest Number Previously Paid For" IN THIS SPACE is less tha 20, write "20" in this space.

If the "Highest Number Previously Paid For" IN THIS SPACE is less tha 3, write "3" in this space. The "Highest Number Previously Paid For" (Total Independent) i NOTE: the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed.

Please charge my Deposit Account No. $\underline{14-1100}$ in the amount of \$\\ \frac{240.00}{}\$. A duplicate copy of this sheet is enclosed.

A check in the amount of \$ to cover the filing fee is enclosed.

The Commissioner is hereby authorized to charge payment of the $|\mathbf{x}|$ following fees associated with this communication or credit any overpayment to Deposit Account No. 14-1100. A duplicate copy of this sheet is enclosed.

Any additional filing fees required under 37 CFR 1.16

Any patent application processing fees under 37 CFR 1.17.

NILSSON, ROBBINS, DALGARN BERLINER, CARSON & WURST 201 North Figueroa St., 5th Floor Los Angeles, CA 90012 (213) 977-1001

B. G. Nilsson

Registration No. 17,350

CERTIFICATE OF MAILING I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: s mail in an envelope addressed of Patents and Trademarks of 20231 en June 20, 1991. Washington, DC 20231 on Jul

Sandra Reisman

J